

METHOD FOR MAKING A DIRECT CHIP
ATTACH DEVICE AND STRUCTURE

5

Abstract of the Disclosure

A method for forming a direct chip attach device (1) includes attaching an electronic chip (3) to a lead frame structure (2), which includes a flag (18). Next, conductive studs (22) are attached to bond pads (13) on electronic chip (3) and flag (18) to form a sub-assembly (24). Sub-assembly (24) is then placed in a molding apparatus (27,47), which includes a first plate (29,49) and second plate (31,51). Second plate (31,51) includes a cavity (32,52) for receiving electronic chip (3) and flag (18), and pins (36,56). During a molding step, pins (36,56) contact conductive studs (22) to prevent encapsulating material (4) from covering studs (22). This forms openings (6) to receive solder balls (9) during a subsequent processing step.